

CLAIMS

1. A multilayer soundproofing and sound-absorbing panel made of plastics coupled to a second suitable material, characterised in that it comprises a first layer consisting of a plastics foam containing an uniformly dispersed inert filler material and a second layer consisting of a material chosen from the group of textile fibre mat, 100% PES, and polyethylene foam.
2. A panel as claimed in claim 1 wherein said first layer consists of a viscoelastic polyurethane foam made in compliance with state-of-the-art techniques by reacting together (i) at least one compound chosen from ethylene oxides and propylene oxides, (compound A) with (ii) an isocyanate compound, (compound B), in said polyurethane foam being uniformly dispersed a micronized inert material chosen from fibreglass, calcium carbonate, artificial and natural textile fibres, silica, and similar in combination or alone, (compound C).
3. A panel as claimed in claim 2 wherein said ethylene and propylene oxides have a molecular weight falling within the range from 200 to 10,000, an hydroxyl number falling within the range from 20 to 1000, and functionality falling within the range from 2 to 8.
4. A panel as claimed in claim 3 wherein said ethylene and propylene oxides have a molecular weight falling within the range from 200 to 6000.
5. A panel as claimed in claim 3 wherein said ethylene and propylene oxides have a molecular weight falling within the range from 4000 to 6000.
6. A panel as claimed in claim 2 wherein said isocyanate compound is chosen from the group consisting of toluene diisocyanate, polymethylene-polyphenyl-isocyanates, and diphenylisocyanates.
7. A panel as claimed in claim 2 wherein said micronized material has a particle size falling within the range from 10 to 500 μm .
8. A panel as claimed in claim 7 wherein said particle size falls within the range from 50 to 200 μm .
9. A panel as claimed in claim 2 wherein said micronized material is present in said first layer in amounts expressed in percentages by weight falling within the range from 5 to 50.
10. A panel as claimed in claim 9 wherein said micronized material is present in

said first layer in amounts expressed in percentages by weight falling within the range from 10 to 30.

11. A panel as claimed in claim 1 wherein said first layer features a free or visible face with impressions having a broadly curvilinear shape, ideally circular or oval or elliptical.

12. A panel as claimed in claim 11 wherein said impressions have a maximum transversal dimension falling within the range from 5 to 15 mm, a depth falling within the range from 2 to 6 mm, and a distance between centres from 1.10 to 1.80 times said maximum transversal dimension.